Chapter I

THE CAPTAIN OF THE MEN OF DEATH

The tubercle bacillus has afflicted mankind for thousands of years. Evidence of tuberculous infection has been found in bones dating back to the palaeolithic and to the neolithic periods. Guthrie in his *History of medicine* quotes G Elliott Smith and D E Derry, who found a mummy of a high dignitary of the 21st Dynasty — about 100 B.C. — which had 'kyphosis in the thoracic region resulting from collapse of the thoracic vertebrae and a large psoas abscess'. This deformity, commonly known as a hump back, used to be frequently seen. The psoas abscess is so called because the pus from the affected vertebrae tracks down the sheath of the adjacent psoas muscle and appears in the region of the groin.

Tuberculosis was common in the ancient world. The early Indian physicians, the Arabs, and certainly the Greeks knew about it, and wrote about it. Hippocrates is said to have coined the word 'phthisis' meaning a wasting disease. Galen believed it was an infection. No one knows when tuberculosis came to Ireland. Archbishop Alexander, who was Primate of Armagh, records in his biography that in his boyhood, in the early years of the last century, the people of Donegal called tuberculosis the 'English cold'. Some might speculate that Donegal men, who went to work in England at harvest time, brought the tubercle bacillus home with them; just as Donegal men, who were believed to have served in Egypt with Napoleon's army, had brought back trachoma — a disease of the eyes common in Egypt and which often results in blindness.

In the nineteenth century and in the early years of the twentieth, tuberculosis was a scourge not only in Ulster but all over Ireland. The death rate was very high. Sir Robert Matheson, the Registrar General for Ireland, recorded in 1907: 'According to the *Report of the Census Commissioners* from June 1831 to January 1841 the number of deaths in Ireland due to tuberculosis was 135,000. Between June 1841 and March 1851 there were 153,098 deaths. Between March 1851 and April 1861 the number was 130,759. The Commissioners remarked that this malady is "By far the most fatal affliction to which the citizens of this country are subject". Having regard to the manner in which this information was obtained even this appalling total may be considerably under the truth'.

In Belfast between 1882 and 1908, 25% of those who died, did so as a result of tuberculosis. Each year there were over 1,000 deaths from the disease. As Sir William Osler pointed out, 1,200 deaths from tuberculosis in a year indicated that there were at least 120,000 cases of the disease — this in a city with a population in 1900 of 348,180. The death rate remained at this level until 1918.

There was a variety of possible explanations. One was the poor housing. A G Malcolm, in a paper read in 1862 to the Statistical Section of the British Association, described the workers' homes in Belfast: 'The great majority of the poorer classes of houses consist of four rooms in two storeys. These are usually occupied by two families. Each room varies from seven to 10 feet square. Each has usually, but not always, a window. The upper sash is invariably immovable. Not infrequently as many as 18 or 20 people sleep in this limited accommodation. There is a great want of systematic drainage. What there is, is of a most primitive

character signifying that the rain from the clouds and the sewage from the dwellings are at liberty to make their own intersections and channels without any interference on the part of man'.

Another explanation was the working conditions. Dr C D Purdon in 1872, in an address to the annual meeting of Certifying Medical Officers of Great Britain and Ireland, gave a graphic account of the ill-health produced by workers in the linen mills. In one process, moisture was essential and the clothes of the workers soon became saturated with spray from the looms. When work was over for the day, they made their way to their homes, which were sometimes a considerable distance away, in their wet clothes, to a meal of bread and tea. This was the staple diet. If one member of a household of such debilitated individuals contracted tuberculosis in their overcrowded and ill-ventilated rooms, the disease readily spread to others in the family.

The Victorians took a very pessimistic view of tuberculosis, with good reason. Too often they had had the melancholy experience of losing several or all the members of their family to what was then a quite mysterious affliction. It was regarded as the 'will of God', 'a decline', or a 'weakness that ran in families'. The Victorian novelists had a lot to say about tuberculosis; it was a very genteel way of disposing of characters in their books. Keats, who himself died of tuberculosis, wrote that 'youth grows pale and spectre thin and dies'. Charlotte Brontë, whose sister Emily died of tuberculosis, wrote in *Shirley* a description of Caroline Helston's illness, clearly with the experience of Emily's illness in her mind, 'with all this care it seemed strange that the sick girl did not get well; yet such was the case; she wasted away like a snow wraith in thaw; she faded like any flower in drought'.

Tuberculosis was a difficult disease to diagnose. The early symptoms were minor and easily overlooked. Where the disease had advanced to cavity formation in the lungs with a large amount of tubercle bacilli in the sputum, the patient might only complain of being easily tired, with a disinclination to make any effort, a general feeling of debility, a slight cough, a slightly raised pulse rate; and a spitting of blood was often the first evidence that the patient had tuberculosis. Sir William Gull, the eminent Victorian physician, used to tell his students: 'However clever you are you will overlook phthisis, syphilis and itch'.

One who laid the foundations which later helped doctors to make the most difficult diagnosis of tuberculosis was René Théophile Laennec. He was born in Quimper in Brittany in 1787. Though he contracted tuberculosis in early adult life and died of the disease in 1826 at the early age of 45, he had a very productive professional life. He became a physician on the staff of the Necker hospital in Paris; it was there he conceived the idea of his 'stethescope' as he called it. This was simply a wooden tube, one end of which was applied to the patient's chest and the other to the doctor's ear, thus enabling him to hear the breath sounds and the beating of the heart more readily than by putting his ear to the patient's chest. Auscultation, as this procedure was called, was no new thing. Hippocrates had described hearing the sound of 'creaking leather' in a patient who had pleurisy. But as Guthrie recounts in his *History of medicine,* Laennec thought that this procedure was 'inconvenient, indelicate and in hospital even disgusting'. He wrote two books about his findings and coined words such as

'pectoriloquy', 'crepitation' and 'rhonchus' to describe the various noises he had heard — words which doctors still use today. Not only did he describe the various sounds to be heard through his 'stethescope', he also described the naked eye appearances of the changes produced in the lung by tuberculosis, how the lesions could occur as isolated 'follicles' or as infiltration through the lung tissue. He recognised the essential unity of the early semi-transparent tubercle and of the established caseous lesion. No wonder Sir William Osler said of him 'that he had laid the foundations not only of our modern knowledge of tuberculosis but also of modern clinical medicine'.